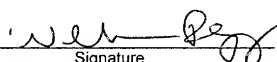


<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) 247171-000426USP1	
	Application Number 10/798,669	Filed March 11, 2004	
	First Named Inventor David J. Wendell		
	Art Unit 3653	Examiner Michael C. McCullough	
<p>Applicant requests review of the final rejection in the above-identified application.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p><input type="checkbox"/> applicant /inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>42,988</u></p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. _____</p> </div> <div style="width: 50%; text-align: center;">   <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>           Signature   <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>           William D. Pegg            Typed or printed name   <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>           (312) 425-3900            Telephone number   <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>           August 15, 2007            Date         </div> </div> <p><small>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</small></p>			
<input checked="" type="checkbox"/> *Total of <u>2</u> forms are submitted.			

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application Number.	: 10/798,669	Confirmation Number:	6277
Applicants	: David J. Wendell <i>et al.</i>	Filed:	March 11, 2004
TC/A.U.	: 3653	Examiner:	Michael C. McCullough
Docket Number	: 47171-000426USP1	Customer Number:	41230

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P.O. Box 1450  
Alexandria, Virginia 22313-1450

**PRE-APPEAL BRIEF RESPONSIVE TO THE MAY 15, 2007 FINAL OFFICE ACTION**

Dear Commissioner:

This pre-appeal brief is being timely submitted together with the required Notice of Appeal and fees in reply to the Final Office Action mailed May 15, 2007. All of the rejections set forth in the Final Office Action are respectfully traversed and reconsideration and withdrawal of these rejections are requested for at least the reasons presented below.

**I. THE 35 U.S.C. § 112, 1<sup>ST</sup> PARAGRAPH REJECTION OF CLAIMS 10 AND 17**

Claim 10 recites an act “interrupting, with the coin moving along a portion of the coin path between the light source and the light detector, the light beam traversing the coin path such that the light beam is not incident on the light detector”. Applicant’s specification sets forth, for example, an optical coin discrimination sensor including a light source 802, a first light guide 804, a second light guide 806, and a light detector 808 wherein, “[a]s a coin moves along the queuing channel 760 and past the first light guide 804, the opaque nature of the coins . . . prevents the first light guide 804 from receiving the light emitted by the light source 802” and “blocking of the first light guide 804 causes an interruption in the light beam, which prevents light from the light source 802 from illuminating the light detector 808” (*see, e.g.*, [0105], [0113]; FIGS. 14a-14c). Thus, events where the light beam not incident on the light detector are clearly supported in the specification. Moreover, the Examiner has not discharged the burden of presenting evidence showing that a person skilled in the art would not recognize in Applicant’s disclosure a description of the invention defined by the claims and this rejection is improper for at least this reason as well. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976).

## II. THE 35 U.S.C. § 112, 1<sup>ST</sup> PARAGRAPH REJECTION OF CLAIM 1

The Examiner alleged that the term “generally” in the phrase “generally parallel to and spaced slightly away” rendered the claim indefinite “because it is unclear whether the limitation(s) following the phrase are part of the claimed invention.” Applicant submits that this rejection must be withdrawn because the alleged indefiniteness is improperly premised upon 35 U.S.C. § 112, first paragraph (rather than 35 U.S.C. § 112, second paragraph). Moreover, even were the rejection to have been properly cast set forth, the Examiner did not analyze the definiteness of the claim language in view of, *inter alia*, the application disclosure and the claim interpretation that would be given by one of ordinary skill in the art, as required.

## III. THE 35 U.S.C. § 103 REJECTION OF CLAIMS 1, 2, 5-10, 12-16, AND 18-27

Obviousness requires a teaching that all elements of the claimed invention are found in the prior art and “a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007).

Claim 1 recites, *inter alia*, a coin processing system for processing a plurality of coins of mixed denominations comprising a light source is configured to output “a light beam that traverses the coin path” and a light detector is configured to detect the light beam and to generate “a light-detection signal indicative of detecting the light beam, each coin moving along the coin path passing through the light beam resulting in the suspension of the generation of the light-detection signal.” Saarinen fails to disclose or suggest “a light detector for detecting the light beam . . . each coin moving along the coin path passing through the light beam resulting in the suspension of the generation of the light-detection signal.” Instead, Saarinen discloses that denominations are determined by measurement of a quantity of light passing the subject coin, stating that “the measurement is based only on the amount of light which is able to pass the coins when they traverse the measuring point” (col. 2, lines 32-35)(emphasis added).

To overcome this evidentiary deficiency, the Examiner is now engaging in a semantic sleight of hand, alleging that Webster’s II Dictionary (3<sup>rd</sup> Ed.) “defines suspension as the act of suspending,” “defines suspend as interrupt,” “defines interrupt as impede,” and “defines impede as obstruct” to arrive at the conclusion that “[t]herefore, a coin in Saarinen will *obstruct* the light source from the light sensor and *hinder* the detection signal” (see numbered paragraph 8 of Final Office Action)(emphasis added). This cascade of “definitions” is contrary to the fundamental

precepts of claim interpretation set forth in, for example, *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) (*en banc*). In *Phillips*, the Court emphasized that, “[i]mportantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification,” and that the meaning of the claims must be ascertained “in the context of the written description and the prosecution history.” *Id.* at 1313, 1326. As noted by the Court in *Phillips*, “[i]ndiscriminate reliance on definitions found in dictionaries can often produce absurd results” 415 F.3d at 1322 (*citations omitted*). The Court therefore emphasized that the claims are part of “a fully integrated written instrument” which “must be read in view of the specification, of which they are a part.” 415 F.3d at 1315 (*citing Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978-79 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370, 134 L. Ed. 2d 577, 116 S. Ct. 1384 (1996)). Saarinen does not disclose or suggest “a light-detection signal indicative of detecting the light beam, each coin moving along the coin path passing through the light beam resulting in the suspension of the generation of the light-detection signal” and instead discloses that “the measurement is based only on the amount of light which is able to pass the coins when they traverse the measuring point” (col. 2, lines 32-35).

Still further, “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (2007)(*citing In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)); *see also Ex parte Smith*, 83 USPQ2d 1509, 1515 (Bd. Pat. App. & Int. 2007). Even post-*KSR*, the mere fact that references can be combined or modified does not itself render the resultant combination obvious. Notably, the Court in *KSR* acknowledged that, in cases more complex than the simple substitution opined on therein, “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41, 82 USPQ2d at 1396. The claims at issue involve much more than a “simple substitution.” In fact, the Examiner’s statement that “[i]t would have been obvious . . . to modify Saarinen et al. by utilizing a rotatable disc, an encoder, and a stationary sorting head . . . for the

purpose of monitoring the precise position of each separate coin from the time that coin passes a fixed counting station until the coin is sorted and discharged” is predicated on a wholesale redesign of the device of Saarinen, a simple device in a non-rotational measurement system (*i.e.*, the light column 4, lens 5, coin path 2, and sensor 4 are all stationary) in which the subject coins are exposed or open on both sides (*see* FIG. 1) permitting the light column 3 and lens 5 to be readily disposed on opposing sides thereof, such that each coin occludes a portion of the incident light and allows another portion of the incident light to pass to the lens 5. The asserted purpose for the modification, position monitoring, is in discord with the disclosure by Saarinen that the position can be accurately determined by the coin velocity, which is obtained by the light sample measures taken for each coin, and that using such velocity information allows the coin to be “reliably removed” by the sorting/rejecting unit 10, if necessary (*see* col. 5, lines 1-10). Thus, there is no cognizable basis for the motivation to combine asserted by the Examiner. Moreover, the Examiner has not set forth any evidence that modification of such a device would bear a reasonable expectation of success in the system of Rasmussen, nor is such a redesign suggested by Saarinen and/or Rasmussen (or any other evidence of record). Saarinen, in fact, *teaches away from* such modification for at least the reason that Saarinen seeks to avoid a “complicated structure” or structures with a “considerable cost” (col. 1, line 50 to col. 2, line 16).

In the “Background of the Invention,” Saarinen states that the invention relates to a device for identifying coin type articles comprising “a photosensitive light sensor for converting the light which passes the coin into an electric signal dependent on the diameter of the coin” (col. 1, lines 14-16). In the “Summary of the Invention,” Saarinen states that the invention “is characterized in that the light source is column-like; that a lens assembly is arranged in front of a photosensitive sensor, behind the coin path, for projecting an image of the light source onto the sensor; and that the sensor is effective to measure the amount of light by converting the light in the light emitted column by the light source and passing the coin into an electric signal whose value is dependant upon the diameter of the coin.” (col. 2, lines 18-26). Thus, Saarinen quantitatively uses an amount of light from a light column 3 passing a subject coin to determine a denomination of the coin. Nothing of record suggests modification of the light column 3 and light sensor 4 of Saarinen in the manner claimed in claim 1 or in any of the other independent claims to utilize the suspension of a light beam or interruption of a light beam in combination with encoder counts or pulses, as variously recited.

Similar arguments to those noted above also apply to independent claims 10, 22, and 23 and claims depending therefrom. Saarinen fails to disclose or suggest "interrupting, with the coin moving along a portion of the coin path between the light source and the light detector, the light beam traversing the coin path such that the light beam is not incident on the light detector" or "counting, with the controller, the number of encoder pulses generated by an encoder during the interruption of the light beam" (claim 10); "interrupting the light beam traversing the coin path for a period in which the coin is moving through the light beam traversing the coin path" or "counting a number of encoder pulses occurring during the period" (claim 22); or "developing a signal at the light detector indicating the presence of a coin in the coin path" and "counting a number of encoder pulses occurring while developing the signal at the light detector" (claim 23).

#### IV. THE 35 U.S.C. § 103 REJECTION OF CLAIMS 3, 4, 11, AND 17

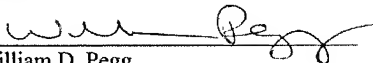
All of the remarks noted above with respect to the deficiencies of Saarinen and Rasmussen in the aforementioned 35 U.S.C. § 103 rejection are submitted to apply equally to the 35 U.S.C. § 103 rejection of claims 3, 4, 11 and 17 and are incorporated herein by reference, but are otherwise omitted for brevity. Applicant submits that Panzeri et al. is insufficient to make up for the deficiencies of Saarinen and/or Rasmussen. Panzeri et al., like Saarinen, discloses that the coin 4 only intercepts "*a portion of this laser beam 13* that passes between the laser diode 11 and the sensor array unit 3" (col. 7, lines 51-55)(emphasis added). Thus, Panzeri et al., like Saarinen, fails to disclose or suggest "suspending" or "interrupting" the light beam, as claimed.

#### V. CONCLUSION

The Applicants submit that the claims are in a condition for allowance and action toward that end is earnestly solicited. Should any additional fees be required (except for payment of the issue fee), the Commissioner is authorized to deduct the fees from Nixon Peabody LLP Deposit Account No. 50-4181, Order No. 247171-000426USP1.

Respectfully submitted,

August 15, 2007  
Date

  
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